

*Stated Meeting, March 28, 1906.*

The President, DR. GEORGE WOOLSEY, in the *Chair*.

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#### TREATMENT OF FRACTURE OF THE FEMUR IN A CHILD.

DR. THEODORE DUNHAM presented a girl, three years old, who had sustained a fracture of the left thigh seventeen days previously. The case was shown to illustrate the improved splint devised by Dr. Dunham for the treatment of the femur in young children, which was described by him in a paper on the subject read before this society in December, 1904.

The special advantage claimed for the splint was that it secured extension to the broken thigh without keeping the child in bed, which meant a great deal to the general health of the patient. This splint did not interfere with an infant's sitting on the mother's lap and nursing, the diapers could be changed when necessary, etc.

The splint consisted, essentially, of a plaster-of-paris spica bandage about the pelvis and upper section of the thigh, and a second plaster-of-paris bandage extending from the toes to the knee. Into each of these splints a thin piece of flat iron was rigidly incorporated by means of plaster-of-paris, which for that purpose should have about the consistency of thick cream. In order to secure extension, it was only necessary to have one person take hold of the pelvic girdle, and another of the leg, and make traction in the line of the femur. The upper end of the piece of iron that was incorporated into the lower plaster bandage overlapped the lower end of the iron that was incorporated into the plaster spica above, and by means of the traction caused one to slide on the other two clamps; the irons were then firmly held together, maintaining the extension.

By means of this splint, which could be readily removed and replaced if the conditions demanded it, the necessary extension was secured; it also prevented any rotary displacement of the lower fragment, and angular deformity could be corrected by coaptation splints.

Dr. Dunham said he had thus far treated seven cases by this method, and all of them with excellent results. His youngest patient thus treated was two weeks old: a case of the fracture of the femur occurring at birth. The fracture had been neglected for two weeks and a large traumatic tumor had formed, but in spite of that the result was excellent. The method did not interfere with massage treatment, if that was indicated, nor with the taking of an X-ray picture, and the thigh was always free for inspection and palpation; but above all else, the greatest advantage was that the patient could be carried about, and could sit comfortably in a steamer chair. An anæsthetic was unnecessary in the application of this splint.

#### CHARCOT'S DISEASE OF THE TARSAL JOINTS.

DR. JOHN A. HARTWELL presented a man aged 40 years who applied to the Out-Patient Department of Bellevue Hospital to get treatment for a swelling about the ankle. He gave a history of having had syphilis twelve years ago, when he was under treatment for about ten months. Subsequent to that he had had no symptoms referable to this infection. In December, 1904, he had had an open sore on the sole of the foot which he said was a corn, and which had become infected by being cut. Following this he had a severe infection in the whole of the foot which necessitated multiple incisions and drainage. The condition continued until April, 1905, before the wounds were entirely healed. He then first noted that the ankle joint was swollen and stiff, it was, however, not painful, and he was able to walk on it. This condition about the ankle has continued ever since, sometimes being more marked than at others, but never entirely disappearing. He has at no time suffered any pain since the infectious process cleared up. His general health has been entirely good. Physical Examination, March 14th 1906: General nutrition good. No distinct conditions that can positively be assigned to syphilis. Examination of pupillary reflexes shows a slow and rather feeble reaction to light, and a prompt reaction to distance. The knee jerks are both present, though not pronounced. Plantar reflexes present. There is no evidence of Romberg's sign; and the gait is not ataxic. The lower extremities show disturbed pain sensation to the level of Poupart's liga-

ment, but neither tactile or temperature sensation is in the least impaired. No evidence of impairment of the muscular sense is made out. Examination of the foot shows the scars of the old incisions for the infectious process, but none of these seem to have extended beyond the metatarsal portion of the foot. The scar on the sole looks more like that of a perforating ulcer, than from a superficial infection. Left ankle measures in circumference  $18\frac{1}{2}$  inches, the right 12 inches. Distance between the two malleoli shows an increase of one inch on left side over that on right. The swelling thus indicated seems to be rather uniformly distributed throughout the tarsus. The motion in the ankle and tarsal joint is not restricted and is not painful. Palpation elicits a marked bony crepitus over the head of the astragalus and over the dorsal surface of the scaphoid cuboid and external cuneiform bones. There is a distinct bony fragment palpable at the astragalo—scaphoid articulation, and the breaking down of the arch allows a marked bulging of the cuboid into the sole of the foot. All these conditions are distinctly shown by the radiograph (Fig. 1) which shows a considerable disintegration of the bones in question. Dr. Hartwell showed the case as one of probable Charcot disease of the tarsal joints in a patient whose only symptoms of tabes were a suspicion of the Argyle-Robertson pupil, and a diminished knee jerk, and a pain sense disturbance with a previous etiological factor in the form of syphilis. The patient had been seen by a competent neurologist, who expressed the opinion that the condition was one of early tabes. The lesion was a rare one, in that the tarsal joint is not often involved and the joint conditions are uncommon previous to marked manifestations of tabes dorsalis.

DR. L. W. HOTCHKISS said he had seen but one case of Charcot's joint involving the ankle.

DR. WOOLSEY said he had never seen the ankle involved in such a case.

DR. HARTWELL, in closing, said that about a year ago, at the Lincoln Hospital, he saw a somewhat similar case. The patient was a man about 60, a sailor, who showed no evidences of syphilis, and gave no history of that disease. There were no actual signs of tabes. One ankle joint was apparently disorganized, as in this case, and it had been so painful that the man had been unable



FIG. 1.—Charcot's disease in tarsus, showing disorganization of joint structure.

to leave his bed for two months. Upon cutting into the joint, it was found to be totally disorganized, so that amputation of the foot was deemed advisable.

An examination of the specimen showed an osteitis, with destruction of the bones at the joint. There was no nerve lesion nor other demonstrable etiological factor. The case was classified under the general term of arthritis deformans. The man had never had any acute symptoms in the joint, and the other joints of the body were apparently normal.

#### STENOSIS OF THE PYLORUS IN INFANCY.

DR. ARTHUR L. FISK read a paper with this title (for which see page 1).

DR. WOOLSEY said that in a case recently reported by Dr. John Rogers there was apparently very little thickening of the pylorus, and the speaker said he understood that that was a feature in many of these cases. In Dr. Rogers' case, as he recalled it, a sound could be introduced through the pylorus, although all the characteristic symptoms of stenosis were present. The speaker asked whether extreme hypertrophy of the parts seemed to be the rule in these cases?

DR. C. A. WILLIAMS said he had assisted Dr. Rogers at two operations for the relief of pyloric stenosis in two young infants, and in both of them the pylorus was nearly as large as double the size of an adult thumb; it was hard, like cartilage, and there seemed to be scarcely any lumen. There was considerable shrinkage of the pylorus after death in the one patient who died; and the pyloric opening admitted a 20 French sound, a large part of the previous stenosis being evidently due to spasm.

As to the choice of operation in these cases, Dr. McWilliams said he was convinced that a gastro-enterostomy was a much easier and safer operation than pyloroplasty. In the latter even in an adult it is difficult to be certain as to the size of the channel left after the suturing, and this difficulty is much greater in an infant. In two of nine recorded cases of pyloroplasty in infants, there resulted subsequently complete pyloric obstructions. Gastro-enterostomy is the preferable operation, because firstly, it is better to operate on normal than on morbid tissues; secondly, feeding

can be commenced at once after gastro-enterostomy; thirdly, the time required for the operation is no longer, if as long; and fourthly, the remote results after gastro-enterostomy have been proved to be highly satisfactory, while as yet we do not know that those after pyloroplasty are as good.

DR. HARTWELL reported a case of a woman, 60 years old, who about two months ago complained of pain on the left side of the abdomen. Shortly afterwards she began to vomit, and this continued, more or less persistently, for three or four weeks, in spite of lavage and medical treatment. She had vomited some blood, and an examination of the stomach contents showed a diminution of hydrochloric acid.

As the patient was rapidly losing ground, and carcinoma of the stomach was suspected, the abdomen was opened. There was some questionable thickening about the pylorus, with slight dilatation of the stomach, but the diagnosis of carcinoma was not confirmed. No cause for the persistent vomiting was found. A posterior gastro-enterostomy by the suture method was done. The woman made a perfect recovery from the operation, and for five or six days felt relieved; then the vomiting recurred; it was persistent, but not of the type that suggested a vicious circle. Nothing further was done, and the patient died about a month after the operation.

At the autopsy it was found that the gastro-enterostomy wound had healed perfectly, with an opening large enough to admit the thumb. There was no evidence of a vicious circle. The pyloric opening readily admitted the index-finger, although it seemed somewhat resistant. No cause was discovered for the vomiting or death. There was no brain lesion; no nephritis; no evidences of liver disease.

DR. FISK, in closing, said that in all cases of true pyloric stenosis, hypertrophy had been found. In cases of apparent stenosis, that improved under medical treatment, the symptoms were attributed to spasm of the pylorus, and not to true stenosis, with thickening. It is very difficult to distinguish between these two conditions. In cases of true stenosis, it is important to make the diagnosis as soon as possible, and operate early.

In regard to choosing between gastroenterostomy and a pyloroplasty in dealing with this condition, Dr. Fisk called atten-

tion to the fact that Dent resorted to the latter operation in all of his cases, and all recovered. Dent claims that pyloroplasty can be done more quickly than gastroenterostomy. And Dr. Fisk considered it preferable from every possible standpoint,—physiological, anatomical, and surgical.

Dr. Fisk said that about a year ago he saw a young woman with symptoms very similar to those in the case reported by Dr. Hartwell. He did an exploratory laparotomy, and found thickening of the pylorus. Her vomiting, which had been very persistent, was permanently relieved by a Finney operation.